OIPE

RAW SEQUENCE LISTING DATE: 05/08/2001 PATENT APPLICATION: US/09/838,785 TIME: 15:43:16

Input Set : A:\A-0341.app

Output Set: N:\CRF3\05082001\I838785.raw

ENTERED

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3 <110> APPLICANT: Lau, Ted
              Lin, Rick
              Parkes, Debbie
              Parry, Gordon
              Schneider, Douglas
              Steinbrecher, Renate
              Van Heuit, Pam T
              Wu, John
     12 <120> TITLE OF INVENTION: DNA Encoding a Novel PROST 03
     14 <130> FILE REFERENCE: 51831AUSM1
C--> 16 <140> CURRENT APPLICATION NUMBER: US/09/838,785
C--> 17 <141> CURRENT FILING DATE: 2001-04-20
     19 <150> PRIOR APPLICATION NUMBER: 60/200,065
     20 <151> PRIOR FILING DATE: 2000-04-27
     22 <160> NUMBER OF SEQ ID NOS: 26
     24 <170> SOFTWARE: PatentIn Ver. 2.0
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 3320
     28 <212> TYPE: DNA
     29 <213> ORGANISM: Homo sapiens
    31 <220> FEATURE:
     32 <221> NAME/KEY: CDS
     33 <222> LOCATION: (282)..(1943)
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    40 gctggaccgg caccaaaggg ctggcagaaa tgggcgcctg gctgattcct aggcagttgg 180
    42 cggcagcaag gaggagaggc cgcagcttct ggagcagagc cgagacgaag cagttctgga 240
    44 gtgcctgaac ggccccctga gccctacccg cctggcccac t atg gtc cag agg ctg 296
                                                      Met Val Gln Arg Leu
    46
    48 tgg gtg agc cgc ctg ctg cgg cac cgg aaa gcc cag ctc ttg ctg gtc
    49 Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala Gln Leu Leu Leu Val
                         10
                                             15
    52 aac ctg cta acc ttt ggc ctg gag gtg tgt ttg gcc gca ggc atc acc
    53 Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu Ala Ala Gly Ile Thr
                                         30
    56 tat gtg ccg cct ctg ctg gaa gtg ggg gta gag gag aag ttc atg
    57 Tyr Val Pro Pro Leu Leu Glu Val Gly Val Glu Glu Lys Phe Met
                40
                                     45
    60 acc atg gtg ctg ggc att ggt cca gtg ctg ggc ctg gtc tgt gtc ccg
                                                                           488
    61 Thr Met Val Leu Gly Ile Gly Pro Val Leu Gly Leu Val Cys Val Pro
    64 ctc cta ggc tca gcc agt gac cac tgg cgt gga cgc tat ggc cgc cgc
    65
       Leu Leu Gly Ser Ala Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg
       70
    66
                             75
                                                 80
                                                                     85
    68 cgg ccc ttc atc tgg gca ctg tcc ttg ggc atc ctg ctg agc ctc ttt
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70	AI 9	FIU	rne	TIE	90	Ala	Leu	ser	ьeu	95	шe	Leu	Leu	Ser		Phe	
	ctc	atc	cca	agg		ggc	taa	cta	aca		cta	cta	t đầ	000	100	~~~	632
73	Leu	Ile	Pro	Arq	Ala	Gly	Tro	Leu	Ala	Glv	Len	Leu	Cve	Pro	Acn	Dro	032
74				105		1	F	204	110	O-1	ьси	Dea	Cys	115	дор	FIU	
76	agg	ccc	ctg	gag	ctq	gca	cta	ctc		cta	aac	ata	aaa		cta	gac	680
77	Arg	Pro	Leu	Ğlu	Leu	Ala	Leu	Leu	Ile	Leu	Glv	Val	Glv	Leu	Leu	Asp	000
·78·			120					125			2		130			1101	
80	ttc	tgt	ggc	cag	gtg	tgc	ttc	act	cca	ctg	gag	gcc	ctg	ctc	tct	gac	728
81	Phe	Cys	Gly	Gln	Val	Cys	Phe	Thr	Pro	Leu	Glu	Āla	Leu	Leu	Ser	Asp	
82		135			٠.		140					145	•			_	
84	ctc	ttc	cgg	gac	ccg	gac	cac	tgt	cgc	cag	gcc	tac	tct	gtc	tat	gcc	776
85	Leu	Phe	Arg	Asp	Pro	Asp	His	Cys	Arg	Gln	Ala	Tyr	Ser	Val	Tyr	Ala	
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88	ttc	atg	atc	agt	ctt	ggg	ggc	tgc	ctg	ggc	tac	ctc	ctg	cct	gcc	att	824
89	Pne	Met	тте	Ser		Gly	Gly	Cys	Leu		\mathtt{Tyr}	Leu	Leu	Pro	Ala	Ile	
90	~~~	.			170					175					180		
92	yac Nan	Lgg	gac	acc	agt	gcc	ctg	gcc	ccc	tac	ctg	ggc	acc	cag	gag	gag	872
94	кър	пр	Asp	185	ser	Ala	ьeu	Ата		Tyr	Leu	GLY	Thr		Glu	Glu	
	tac	ctc	+++		at a	ctc	300	ata	190	++-				195			
97	Cvs	Leu	Phe	G1v	Len	Leu	Thr	Tou	TIO	Dho	CTC	acc	tgc	gta	gca	gcc	920
98	0,0	Dea	200	Gry	beu	ьеu	T 11.T	205	ire	Pile	Leu	THE	210	var	Ата	Ala	
	aca			ata	act	gag	gag		aca	cta	aac			~~~	000	gca	968
101	Thr	Leu	Leu	Val	Ala	Glu	Glu	Ala	Ala	Leu	Glv	Pro	Thr	Glu	Pro	Ala	900
102		215					220				. 011	225		OLU	110	AIG	
104	gaa	ggg	ctg	tcg	gcc	ccc			tcq	ccc	cac			cca	t.ac	cgg	1016
105	Glu	Gly	Leu	Ser	Ala	Pro	Ser	Leu	Ser	Pro	His	Cys	Cys	Pro	Cvs	Arg	1010
106	230					235					240)				245	
108	gcc	cgc	ttg	gct	ttc	cgg	aac	ctg	ggc	gcc	ctg	ctt	ccc	cgg	ctg	cac	1064
109	Ala	Arg	Leu	Ala	Phe	Arg	Asn	Leu	Gly	Ala	Leu	Leu	Pro	Arg	Leu	His	
110					250					255					260		
112	cag	ctg	tgc	tgc	cgc	atg	ccc	cgc	acc	ctg	cgc	cgg	ctc	ttc	gtg	gct	1112
$\frac{113}{114}$	GIN	Leu	Cys		Arg	Met	Pro	Arg		Leu	Arg	Arg	Leu		Val	Ala	
	~~~	at a	+~~	265	<b>.</b>				270					275			
117	Clu	tou	Crra	agc	tgg	atg	gca	ctc	atg	acc	ttc	acg	ctg	ttt	tac	acg	1160
118	GIU	neu	280	ser	тгр	Met	Ата		мет	Thr	Phe	Thr		Phe	Tyr	Thr	
	αat	ttc		aac	a = a	~~~	a+ a	285	~~~	~~~			290			ccg	1000
121	Asp	Phe	Val	Glv	Glu	Gly	Len	Tur	Cag	Glw	gra v=1	CCC	aga	gct	gag	ccg	1208
122		295		0.1	- Cara	Orl	300	111	GIII	GIY	val	305	ALG	Ата	GIU	PIO	
124	qqc	acc	qaq	qcc	caa	aga		tat	gat	даа	aac		caa	ato	ααα	2.00	1256
125	Gly	Thr	Ğlu	Āla	Arg	Arg	His	Tvr	Asp	Glu	Glv	Val	Ara	Met	Glv	Ser	1230
126	310				_	315		-		•	320		5		011	325	
128	ctg	ggg	ctg	ttc	ctg	cag	tgc	gcc	atc	tcc	ctq	atc	ttc	tct	cta	atc	1304
129	Leu	Gly	Leu	Phe	Leu	Gln	Cys	Āla	Ile	Ser	Leu	Val	Phe	Ser	Leu	Val	
130					330					335					340		
132	atg	gac	cgg	ctg	gtg	cag	cga	ttc	ggc	act	cga	gca	gtc	tat	ttg	gcc	1352
133	Met	Asp	Arg	Leu	Val	Gln	Arg	Phe	Gly	Thr	Arg	Ala	Val	Tyr	Leu	Ala	

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138			360					365					370				
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					-				_	-					Thr		•
142		375					380					385	•				
144	tca	gcc	ctg	caq	atc	ctg	ccc	tac	aca	ctg	qcc	tcc	ctc	tac	cac	cgg	1496
145	Ser	Āla	Leu	Gln	Ile	Leu	Pro	Tyr	Thr	Leu	Āla	Ser	Leu	Tyr	His	Arg	
146	390					395		_			400			•		405	
148	gag	aag	cag	gtg	ttc	ctg	ccc	aaa	tac	cga	ggg	gac	act	gga	ggt	gct	1544
149	Glu	Lys	Gln	Val	Phe	Leu	Pro	Lys	Tyr	Arg	Gly	Asp	Thr	Gly	Gly	Ala	
150					410					415					420		
152	agc	agt	gag	gac	agc	ctg	atg	acc	agc	ttc	ctg	cca	ggc	cct	aag	cct	1592
153	Ser	Ser	Glu	Asp	Ser	Leu	Met	Thr	Ser	Phe	Leu	Pro	Gly	Pro	Lys	Pro	
154				425					430					435			
156	gga	gct	ccc	ttc	cct	aat	gga	cac	gtg	ggt	gct	gga	ggc	agt	ggc	ctg	1640
157	Gly	Ala	Pro	Phe	Pro	Asn	Gly	His	Val	Gly	Ala	Gly	Gly	Ser	Gly	Leu	
158			440					445					450				
160	ctc	cca	cct	cca	ccc	gcg	ctc	tgc	ggg	gcc	tct	gcc	tgt	gat	gtc	tcc	1688
161	Leu	Pro	Pro	Pro	Pro	Ala	Leu	Cys	Gly	Ala	Ser	Ala	Cys	Asp	Val	Ser	
162		455					460					465					
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		Arg	Val	Val	Val	_	Glu	Pro	Thr	Glu		Arg	Val	Val	Pro	_	
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	ser	GIn	val		Pro	Ser	Leu	Phe		GLY	Ser	Пе	Val		Leu	Ser	
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178	GIII	ser	520	TIII	Ald	TAT	Met	525	ser	Ald	Ата	GIY	530	GIY	Leu	Val	
	a00	2++		+++	aat	202	a 2 a		at a	+++	~~~	224		~~ <i>~</i>	ttg	999	1928
	_						_	-	_		-	_	_	_	Leu		1920
182	AIG	535	1 <b>y</b> 1	FIIC	ALC.	1111	540	Val	Val	FIIC	изр	545	Ser	кар	пеп	AIG	
	aaa		tca	aca	tag	aaaa		rca c	rcaca	ttac	ra at		aaaca	t ac	cctca	acta	1983
	Lys				cug	auuc		, cu	,cuc		יפ פי	-9945	,,,,,,,	, -9		1019	1,00
186	-	-1-	001														
		ccac	rct o	cccc	retec	et. at	t.agc	eccca	a tara	aact	acc	aaaa	taac	eca c	caat	tteta	2043
	ggtcccagct ccccgctcct gttagcccca tggggctgcc gggctggccg ccagtttctc ttgctgccaa agtaatgtgg ctctctgctg ccaccctgtg ctgctgaggt gcgtagctgc																
	acagetgggg getggggegt cecteteete tetececagt etetaggget geetgaetgg																
	aggccttcca agggggtttc agtctggact tatacaggga ggccagaagg gctccatgca																
					_	_	-	-		_			_			ctcct	
		_			-	-								_	-	gtttc	
	_					_		_					_		-	tttct	
			_				-		-		-	_	_			gagtc	
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210 tagettttet gtgttggtgt ctaatatttg ggtagggtgg gggateecca acaateaggt 2703
212 cccctgagat agctggtcat tgggctgatc attgccagaa tcttcttctc ctggggtctg 2763
214 gccccccaaa atgcctaacc caggaccttg gaaattctac tcatcccaaa tgataattcc 2823
216 aaatgctgtt acccaaggtt agggtgttga aggaaggtag agggtggggc ttcaggtctc 2883
218 aacggettee etaaceacce etettetett ggeecageet ggtteecece aetteeacte 2943
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222 aacttteeec tacceccaac ttteececace ageteeacaa eeetgtttgg agetaetgea 3063
224 ggaccagaag cacaaagtgc ggtttcccaa gcctttgtcc atctcagccc ccagagtata 3123
226 tetgtgettg gggaatetea cacagaaact caggageace eeetgeetga getaagggag 3183
228 gtcttatctc tcaggggggg gtttaagtgc cgtttgcaat aatgtcgtct tatttattta 3243
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238 <213> ORGANISM: Homo sapiens
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                 20
                                     25
247 Ala Ala Gly Ile Thr Tyr Val Pro Pro Leu Leu Glu Val Gly Val
             35
                                 40
250 Glu Glu Lys Phe Met Thr Met Val Leu Gly Ile Gly Pro Val Leu Gly
         50
                             55
253 Leu Val Cys Val Pro Leu Leu Gly Ser Ala Ser Asp His Trp Arg Gly
                         70
                                             75
256 Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp Ala Leu Ser Leu Gly Ile
                     85
                                         90
259 Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala Gly Trp Leu Ala Gly Leu
                100
                                    105
262 Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu Ala Leu Leu Ile Leu Gly
            115
                                120
265 Val Gly Leu Leu Asp Phe Cys Gly Gln Val Cys Phe Thr Pro Leu Glu
        130
                            135
                                                140
268 Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg Gln Ala
                        150
                                            155
271 Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu Gly Gly Cys Leu Gly Tyr
                    165
                                        170
274 Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu
                180
                                    185
277 Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu Leu Thr Leu Ile Phe Leu
278
           195
                                200
280 Thr Cys Val Ala Ala Thr Leu Leu Val Ala Glu Glu Ala Ala Leu Gly
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                                                220
283 Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala Pro Ser Leu Ser Pro His
284 225
                        230
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286 Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe Arg Asn Leu Gly Ala Leu
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 289 Leu Pro Arg Leu His Gln Leu Cys Cys Arg Met Pro Arg Thr Leu Arg
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                                                        270
 292 Arg Leu Phe Val Ala Glu Leu Cys Ser Trp Met Ala Leu Met Thr Phe
        275
                                280
 295 Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu Gly Leu Tyr Gln Gly Val
                            295
                                                300
 298 Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
                        310
                                            315
 301 Val Arg Met Gly Ser Leu Gly Leu Phe Leu Gln Cys Ala Ile Ser Leu
                    325
                                        330
304 Val Phe Ser Leu Val Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg
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                                    345
307 Ala Val Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala
308 355
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310 Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
311 370
                            375
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313 Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr Leu Ala
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                                            395
316 Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro Lys Tyr Arg Gly
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319 Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser Leu Met Thr Ser Phe Leu
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                                    425
322 Pro Gly Pro Lys Pro Gly Ala Pro Phe Pro Asn Gly His Val Gly Ala
            435
                  .
                                440
325 Gly Gly Ser Gly Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser
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328 Ala Cys Asp Val Ser Val Arg Val Val Gly Glu Pro Thr Glu Ala
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331 Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
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334 Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met Gly Ser
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                                    505
337 Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met Val Ser Ala Ala
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350 <213> ORGANISM: Artificial Sequence
352 <220> FEATURE:
353 <223> OTHER INFORMATION: Description of Artificial Sequence: primer
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356 ggtggcgacg actcctggag cc
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VERIFICATION SUMMARY

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 $\ \, L:16 \ \, M:270 \ \, C: \ \, Current \ \, Application \ \, Number \ \, differs, \ \, Replaced \ \, Application \ \, Number \ \, L:17 \ \, M:271 \ \, C: \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs, \ \, Replaced \ \, Current \ \, Filing \ \, Date \ \, differs \ \, Current \ \, Filing \ \, Date \ \, Da$